

Section 4: Maintenance & Repair

M&R-1: Missed Repair Appointments

Definition

The percent of trouble reports not cleared by the committed date and time.

Exclusions

- Trouble tickets canceled at the CLEC request
- BellSouth trouble reports associated with internal or administrative service
- Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble

Business Rules

The negotiated commitment date and time is established when the repair report is received. The cleared time is the date and time that BellSouth personnel clear the trouble and closes the trouble report in his/her Computer Access Terminal (CAT) or workstation. If this is after the Commitment time, the report is flagged as a "Missed Commitment" or a missed repair appointment. When the data for this measure is collected for BellSouth and a CLEC, it can be used to compare the percentage of the time repair appointments are missed due to BellSouth reasons. (No access reports are not part of this measure because they are not a missed appointment.)

Note: Appointment intervals vary with force availability in the POTS environment. Specials and Trunk intervals are standard interval appointments of no greater than 24 hours. Standalone LNP historical data is not available in the maintenance systems (LMOS or WLA).

Calculation

Percentage of Missed Repair Appointments = $(a \div b) \times 100$

- a = Count of Customer Troubles Not Cleared by the Quoted Commitment Date and Time
- b = Total Trouble reports closed in Reporting Period

Report Structure

- Dispatch / Non-Dispatch
- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • CLEC Company Name • Submission Date & Time (TICKET_ID) • Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • Geographic Scope <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> • Report Month • BellSouth Company Code • Submission Date & Time • Completion Date • Service Type • Disposition and Cause (Non-Design /Non-Special Only) • Trouble Code (Design and Trunking Services) • Geographic Scope

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Resale Residence	• Retail Residence
• Resale Business	• Retail business
• Resale Design	• Retail Design
• Resale PBX	• Retail PBX
• Resale Centrex	• Retail Centrex
• Resale ISDN	• Retail ISDN
• UNE (Standalone) (Not Available in Maintenance)	• Not Applicable
• 2W Analog Loop Design	• Retail Residence & Business Dispatch
• 2W Analog Loop Non-Design	• Retail Residence & Business (POTS) (Exclusion of Switch-Based Feature Troubles)
• UNE Loop + Port Combinations	• Retail Residence & Business
• UNE Switch Ports	• Retail Residence & Business (POTS)
• UNE Combo Other	• Retail Residence, Business and Design Dispatch
• UNE xDSL (HDSL, ADSL and UCL)	• ADSL Provided to Retail
• UNE ISDN	• Retail ISDN – BRI
• UNE Line Sharing	• ADSL Provided to Retail
• UNE Other Design	• Retail Design
• UNE Other Non-Design	• Retail Residence & Business
• Local Interconnection Trunks	• Parity with Retail
• Local Transport (Unbundled Interoffice Transport)	• Retail DS1/DS3 Interoffice

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	X

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Resale POTS	• Retail Residence and Business (POTS)
• Resale Design	• Retail Design
• UNE Loop + Port Combinations	• Retail Residence and Business
• UNE Loops	• Retail Residence and Business Dispatch
• UNE xDSL	• ADSL Provided to Retail
• UNE Line Sharing	• ADSL Provided to Retail
• Local Interconnection Trunks	• Parity with Retail

M&R-2: Customer Trouble Report Rate

Definition

Percent of initial and repeated customer direct or referred troubles reported within a calendar month per 100 lines/circuits in service.

Exclusions

- Trouble tickets canceled at the CLFC request
- BellSouth trouble reports associated with internal or administrative service
- Customer Provided Equipment (CPE) troubles or CLFC Equipment Trouble

Business Rules

Customer Trouble Report Rate is computed by accumulating the number of maintenance initial and repeated trouble reports during the reporting period. The resulting number of trouble reports are divided by the total "number of service" lines, ports or combination that exist for the CLFCs and BellSouth respectively at the end of the report month.

Calculation

$$\text{Customer Trouble Report Rate} = (a + b) \times 100$$

- a = Count of Initial and Repeated Trouble Reports closed in the Current Period
- b = Number of Service Access Lines in service at End of the Report Period

Report Structure

- Dispatch / Non-Dispatch
- CLFC Specific
- CLFC Aggregate
- BellSouth Aggregate

Data Retained

Relating to CLFC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • CLFC Company Name • Ticket Submission Date & Time (TICKET_ID) • Ticket Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • # Service Access Lines in Service at the end of period • Geographic Scope 	<ul style="list-style-type: none"> • Report Month • BellSouth Company Code • Ticket Submission Date & Time • Ticket Completion Date • Service Type • Disposition and Cause (Non-Design /Non-Special Only) • Trouble Code (Design and Trunking Services) • # Service Access Lines in Service at the end of period • Geographic Scope

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Resale Residence	• Retail Residence
• Resale Business	• Retail Business
• Resale Design	• Retail Design
• Resale PBX	• Retail PBX
• Resale Centrex	• Retail Centrex
• Resale ISDN	• Retail ISDN
• LNP Standalone (Not Available in Maintenance)	• Not Applicable
• 2W Analog Loop Design	• Retail Residence & Business Dispatch

• 2W Analog Loop Non-Design	• Retail Residence & Business (POTS) (Exclusion of Switch-Based Feature Troubles)
• UNE Loop + Port Combinations	• Retail Residence & Business
• UNE Switch Ports	• Retail Residence & Business (POTS)
• UNE Combo Other	• Retail Residence, Business and Design Dispatch
• UNE xDSL (HDSL, ADSL and UCL)	• ADSL Provided to Retail
• UNE ISDN	• Retail ISDN – BRI
• UNE Line Sharing	• ADSL Provided to Retail
• UNE Other Design	• Retail Design
• UNE Other Non-Design	• Retail Residence & Business
• Local Interconnection Trunks	• Parity with Retail
• Local Transport (Unbundled Interoffice Transport)	• Retail DS1/DS3 Interoffice

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Resale POTS	• Retail Residence and Business (POTS)
• Resale Design	• Retail Design
• UNE Loop + Port Combinations	• Retail Residence and Business
• UNE Loops	• Retail Residence and Business Dispatch
• UNE xDSL	• ADSL Provided to Retail
• UNE Line Sharing	• ADSL Provided to Retail
• Local Interconnection Trunks	• Parity with Retail

M&R-3: Maintenance Average Duration

Definition

The Average Duration of Customer Trouble Reports from the receipt of the Customer Trouble Report to the time the trouble report is cleared.

Exclusions

- Trouble tickets canceled at the CLEC request
- BellSouth trouble reports associated with internal or administrative service
- Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble

Business Rules

For Average Duration the clock starts on the date and time of the receipt of a correct repair request. The clock stops on the date and time the service is restored and the BellSouth or CLEC customer is notified (when the technician completes the trouble ticket on his/her CAT or work systems).

Calculation

Maintenance Duration = (a - b)

- a = Date and Time of Service Restoration
- b = Date and Time Trouble Ticket was Opened

Average Maintenance Duration = (c ÷ d)

- c = Total of all maintenance durations in the reporting period
- d = Total Closed Troubles in the reporting period

Report Structure

- Dispatch / Non-Dispatch
- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • Total Tickets (LINE_NBR) • CLEC Company Name • Ticket Submission Date & Time (TICKET_ID) • Ticket Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • Geographic Scope <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> • Report Month • Total Tickets • BellSouth Company Code • Ticket Submission Date • Ticket Submission Time • Ticket Completion Date • Ticket Completion Time • Total Duration Time • Service Type • Disposition and Cause (Non-Design /Non-Special Only) • Trouble Code (Design and Trunking Services) • Geographic Scope

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Resale Residence	• Retail Residence
• Resale Business	• Retail Business

• Resale Design	• Retail Design
• Resale PBX	• Retail PBX
• Resale Centrex	• Retail Centrex
• Resale ISDN	• Retail ISDN
• UNE (Standalone) (Not Available in Maintenance)	• Not Applicable
• 2W Analog Loop Design	• Retail Residence & Business Dispatch
• 2W Analog Loop Non-Design	• Retail Residence & Business (POTS) (Exclusion of Switch-Based Feature Troubles)
• UNE Loop + Port Combinations	• Retail Residence & Business
• UNE Switch Ports	• Retail Residence & Business (POTS)
• UNE Combo Other	• Retail Residence, Business and Design Dispatch
• UNE xDSL (HDSL, ADSL and UCL)	• ADSL Provided to Retail
• UNE ISDN	• Retail ISDN – BRI
• UNE Line Sharing	• ADSL Provided to Retail
• UNE Other Design	• Retail Design
• UNE Other Non-Design	• Retail Residence & Business
• Local Interconnection Trunks	• Parity with Retail
• Local Transport (Unbundled Interoffice Transport)	• Retail DSI/DS3 Interoffice

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Resale POTS	• Retail Residence and Business (POTS)
• Resale Design	• Retail Design
• UNE Loop + Port Combinations	• Retail Residence and Business
• UNE Loops	• Retail Residence and Business Dispatch
• UNE xDSL	• ADSL Provided to Retail
• UNE Line Sharing	• ADSL Provided to Retail
• Local Interconnection Trunks	• Parity with Retail

M&R-4 Percent Repeat Troubles within 30 Days

Definition

Closed trouble reports on the same line/circuit as a previous trouble report received within 30 calendar days as a percent of total troubles closed reported

Exclusions

- Trouble tickets canceled at the CLEC request
- BellSouth trouble reports associated with internal or administrative service
- Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble

Business Rules

Includes Customer trouble reports received within 30 days of an original Customer trouble report.

Calculation

Percent Repeat Troubles within 30 Days = $(a \div b) \times 100$

- a = Count of closed Customer Troubles where more than one trouble report was logged for the same service line within a continuous 30 days
- b = Total Trouble Reports Closed in Reporting Period

Report Structure

- Dispatch / Non-Dispatch
- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • Total Tickets (LINE_NBR) • CLEC Company Name • Ticket Submission Date & Time (TICKET_ID) • Ticket Completion Date (CMPLTN_DT) • Total and Percent Repeat Trouble Reports within 30 Days (TOT_REPEAT) • Service Type • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • Geographic Scope 	<ul style="list-style-type: none"> • Report Month • Total Tickets • BellSouth Company Code • Ticket Submission Date • Ticket Submission Time • Ticket Completion Date • Ticket Completion Time • Total and Percent Repeat Trouble Reports within 30 Days • Service Type • Disposition and Cause (Non-Design /Non-Special Only) • Trouble Code (Design and Trunking Services) • Geographic Scope
<p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Resale Residence	• Retail Residence
• Resale Business	• Retail Business
• Resale Design	• Retail Design
• Resale PBX	• Retail PBX
• Resale Centrex	• Retail Centrex
• Resale ISDN	• Retail ISDN

• LNI (Standalone) (Not Available in Maintenance)	• Not Applicable
• 2W Analog Loop Design	• Retail Residence & Business Dispatch
• 2W Analog Loop Non-Design	• Retail Residence & Business (POTS) (Exclusion of Switch-Based Feature Troubles)
• UNE Loop + Port Combinations	• Retail Residence & Business
• UNE Switch Ports	• Retail Residence and Business (POTS)
• UNE Combo Other	• Retail Residence, Business & Design Dispatch
• UNE xDSL (HDSL, ADSL and UCL)	• ADSL Provided to Retail
• UNE ISDN	• Retail ISDN – BRI
• UNE Line Sharing	• ADSL Provided to Retail
• UNE Other Design	• Retail Design
• UNE Other Non-Design	• Retail Residence & Business
• Local Interconnection Trunks	• Parity with Retail
• Local Transport (Unbundled Interoffice Transport)	• Retail DS1/DS3 Interoffice

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Resale POTS	• Retail Residence and Business (POTS)
• Resale Design	• Retail Design
• UNE Loop + Port Combinations	• Retail Residence and Business
• UNE Loops	• Retail Residence and Business Dispatch
• UNE xDSL	• ADSL Provided to Retail
• UNE Line Sharing	• ADSL Provided to Retail
• Local Interconnection Trunks	• Parity with Retail

M&R-5: Out of Service (OOS) > 24 Hours

Definition

For Out of Service Troubles (no dial tone, cannot be called or cannot call out) the percentage of Total OOS Troubles cleared in excess of 24 hours. All design services are considered to be out of service).

Exclusions

- Trouble Reports canceled at the CLEC request
- BellSouth Trouble Reports associated with administrative service
- Customer Provided Equipment (CPE) Troubles or CLEC Equipment Troubles

Business Rules

Customer Trouble reports that are out of service and cleared in excess of 24 hours. The clock begins when the trouble report is created in LMOS/WFA and the trouble is counted if the elapsed time exceeds 24 hours.

Calculation

Out of Service (OOS) > 24 hours = $(a \div b) \times 100$

- a = Total Cleared Troubles OOS > 24 Hours
- b = Total OOS Troubles in Reporting Period

Report Structure

- Dispatch/Non-Dispatch
- CLEC Specific
- BellSouth Aggregate
- CLEC Aggregate

Data Retained

Relating to CLEC Experience	Relating to BellSouth Experience
<ul style="list-style-type: none"> • Report Month • Total Tickets • CLEC Company Name • Ticket Submission Date & Time (TICKET_ID) • Ticket Completion Date (CMPLTN_DT) • Percentage of Customer Troubles out of Service > 24 Hours (OOS>24_FLAG) • Service type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • Geographic Scope 	<ul style="list-style-type: none"> • Report Month • Total Tickets • BellSouth Company Code • Ticket Submission Date • Ticket Submission time • Ticket Completion Date • Ticket Completion Time • Percent of Customer Troubles out of Service > 24 Hours • Service type • Disposition and Cause (Non-Design/Non-Special only) • Trouble Code (Design and Trunking Services) • Geographic Scope
<p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Resale Residence	• Retail Residence
• Resale Business	• Retail Business
• Resale Design	• Retail Design
• Resale PBX	• Retail PBX
• Resale Centrex	• Retail Centrex
• Resale ISDN	• Retail ISDN

• LNP (Standalone) (Not Available in Maintenance)	• Not Applicable
• 2W Analog Loop Design	• Retail Residence & Business Dispatch
• 2W Analog Loop Non-Design	• Retail Residence & Business (POTS) (Exclusion of Switch-Based Feature Troubles)
• UNE Loop + Port Combinations	• Retail Residence & Business
• UNE Switch Ports	• Retail Residence & Business (POTS)
• UNE Combo Other	• Retail Residence, Business and Design Dispatch
• UNE xDSL (HDSL, ADSL and UCL)	• ADSL Provided to Retail
• UNE ISDN	• Retail ISDN – BRI
• UNE Line Sharing	• ADSL Provided to Retail
• UNE Other Design	• Retail Design
• UNE Other Non-Design	• Retail Residence & Business
• Local Interconnection Trunks	• Parity with Retail
• Local Transport (Unbundled Interoffice Transport)	• Retail DS1/DS3 Interoffice

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

M&R-6. Average Answer Time – Repair Centers

Definition

This measures the average time a customer is in queue when calling a BellSouth Repair Center.

Exclusions

None

Business Rules

The clock starts when a CLEC Representative or BellSouth customer makes a choice on the Repair Center's menu and is put in queue for the next repair attendant. The clock stops when the repair attendant answers the call (abandoned calls are not included).

Note: The Total Column is a combined BellSouth Residence and Business number.

Calculation

Answer Time for BellSouth Repair Centers = (a ÷ b)

- a = Time BellSouth Repair Attendant Answers Call
- b = Time of entry into queue after ACD Selection

Average Answer Time for BellSouth Repair Centers = (c ÷ d)

- c = Sum of all Answer Times
- d = Total number of calls by reporting period

Report Structure

- CLEC Aggregate
- BellSouth Aggregate

Data Retained

Relating to CLEC Experience	Relating to BellSouth Experience
• CLEC Average Answer Time	• BellSouth Average Answer Time

SQM Disaggregation - Analog / Benchmark

SQM Level of Disaggregation	Retail Analog / Benchmark
• Region: CLEC/BellSouth Service Centers and BellSouth Repair Centers are regional.	• For CLEC, Average Answer Times in UNE Center and BRMC are comparable to the Average Answer Times in the BellSouth Repair Centers.

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

M&R-7 Mean Time To Notify CLEC of Network Outages

Definition

This report measures the time it takes for the BellSouth Network Management Center (NMC) to notify the CLEC of major network outages.

Exclusions

None

Business Rules

BellSouth will inform the CLEC of any major network outages (key customer accounts) via a page or email. When the BellSouth NMC becomes aware of a network incident, the CLEC and BellSouth will be notified electronically. The notification time for each outage will be measured in minutes and divided by the number of outages for the reporting period. These are broadcast messages. It is up to those receiving the message to determine if they have customers affected by the incident.

The CLECs will be notified in accordance with the rules outlined in Appendix D of the CLEC "Customer Guide" which is published on the internet at: www.interconnection.bellsouth.com/guides/other_guides/html/gopue/indexf.htm.

Calculation

Time to Notify CLEC = (a - b)

- a = Date and Time BellSouth Notified CLEC
- b = Date and Time BellSouth Detected Network Incident

Mean Time to Notify CLEC = (c ÷ d)

- c = Sum of all Times to Notify CLEC
- d = Count of Network Incidents

Report Structure

- BellSouth Aggregate
- CLEC Aggregate
- CLEC Specific

Data Retained

Relating to CLEC Experience	Relating to BellSouth Experience
<ul style="list-style-type: none"> • Report Month • Major Network Events • Date/Time of Incident • Date/Time of Notification 	<ul style="list-style-type: none"> • Report Month • Major Network Events • Date/Time of Incident • Date/Time of Notification

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	Retail Analog / Benchmark
<ul style="list-style-type: none"> • BellSouth Aggregate • CLEC Aggregate • CLEC Specific 	<ul style="list-style-type: none"> • Parity by Design

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

Section 1.1.1.1 Billing

B-1: Invoice Accuracy

Definition

This measure provides the percentage of accuracy of the billing invoices rendered to CLECs during the current month.

Exclusions

- Adjustments not related to billing errors (e.g., credits for service outage, special promotion credits, adjustments to satisfy the customer)
- Test Accounts

Business Rules

The accuracy of billing invoices delivered by BellSouth to the CLEC must enable them to provide a degree of billing accuracy comparable to BellSouth bills rendered to retail customers of BellSouth. CLECs request adjustments on bills determined to be incorrect. The BellSouth Billing verification process includes manually analyzing a sample of local bills from each bill period. The bill verification process draws from a mix of different customer billing options and types of service. An end-to-end auditing process is performed for new products and services. Internal measurements and controls are maintained on all billing processes.

Calculation

$$\text{Invoice Accuracy} = [(a - b) \div a] \times 100$$

- a = Absolute Value of Total Billed Revenues during current month
- b = Absolute Value of Billing Related Adjustments during current month

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Number of Adjustments
- Geographic Scope
 - Region
 - State

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • Invoice Type <ul style="list-style-type: none"> - UNE - Resale - Interconnection • Total Billed Revenue • Billing Related Adjustments 	<ul style="list-style-type: none"> • Report Month • Retail Type <ul style="list-style-type: none"> - CRIS - CABS • Total Billed Revenue • Billing Related Adjustments

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • Product/Invoice Type <ul style="list-style-type: none"> - Resale - UNE - Interconnection 	<ul style="list-style-type: none"> • CLEC Invoice Accuracy is comparable to BellSouth Invoice Accuracy

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	X

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none"> • CLEC State • BellSouth State 	<ul style="list-style-type: none"> • Parity With Retail

B-2: Mean Time to Deliver Invoices

Definition

Bill Distribution is calculated as follows: **CRIS BILLS**-The number of workdays is reported for CRIS bills. This is calculated by counting the Bill Period date as the first work day. Weekends and holidays are excluded when counting workdays. **J/N Bills** are counted in the CRIS work day category for the purposes of the measurement since their billing account number (Q account) is provided from the CRIS system.

CABS BILLS-The number of calendar days is reported for CABS bills. This is calculated by counting the day following the Bill Period date as the first calendar day. Weekends and holidays are included when counting the calendar days.

Exclusions

Any invoices rejected due to formatting or content errors.

Note:

Business Rules

This report measures the mean interval for timeliness of billing records delivered to CLECs in an agreed upon format. CRIS-based invoices are measured in business days, and CABS-based invoices in calendar days.

Calculation

Invoice Timeliness = (a - b)

- a = Invoice Transmission Date
- b = Close Date of Scheduled Bill Cycle

Mean Time To Deliver Invoices = (c ÷ d)

- c = Sum of all Invoice Timeliness intervals
- d = Count of Invoices Transmitted in Reporting Period

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Geographic Scope
 - Region
 - State

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • Invoice Type <ul style="list-style-type: none"> - J/N - Resale - Interconnection • Invoice Transmission Count • Date of Scheduled Bill Close 	<ul style="list-style-type: none"> • Report Month • Invoice Type <ul style="list-style-type: none"> - CRIS - CABS • Invoice Transmission Count • Date of Scheduled Bill Close

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
Product/Invoice Type <ul style="list-style-type: none"> Resale UNI Inter-connection 	<ul style="list-style-type: none"> CRIS-based invoices will be released for delivery within six (6) business days. CABS-based invoices will be released for delivery within eight (8) calendar days. CLEC Average Delivery Intervals for both CRIS and CABS Invoices are comparable to BellSouth Average delivery for both systems.

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	X

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none"> CLEC State <ul style="list-style-type: none"> CRIS CABS BellSouth Region 	<ul style="list-style-type: none"> Parity with Retail

B-3: Usage Data Delivery Accuracy

Definition

This measurement captures the percentage of recorded usage that is delivered error free and in an acceptable format to the appropriate Competitive Local Exchange Carrier (CLEC). These percentages will provide the necessary data for use as a comparative measurement for BellSouth performance. This measurement captures Data Delivery Accuracy rather than the accuracy of the individual usage recording.

Exclusions

None

Business Rules

The accuracy of the data delivery of usage records delivered by BellSouth to the CLEC must enable them to provide a degree of accuracy comparative to BellSouth bills rendered to their retail customers. If errors are detected in the delivery process, they are investigated, evaluated and documented. Errors are corrected and the data retransmitted to the CLEC.

Calculation

Usage Data Delivery Accuracy = $(a - b) \div a \times 100$

- a = Total number of usage data packs sent during current month
- b = Total number of usage data packs requiring retransmission during current month

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Geographic Scope
Region

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • Record Type <ul style="list-style-type: none"> - BellSouth Recorded - Non-BellSouth Recorded 	<ul style="list-style-type: none"> • Report month • Record Type

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • Region 	<ul style="list-style-type: none"> • CLEC Usage Data Delivery Accuracy is comparable to BellSouth Usage Data Delivery Accuracy

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none"> • CLEC State • BellSouth Region 	<ul style="list-style-type: none"> • Parity with Retail

B-4: Usage Data Delivery Completeness

Definition

This measurement provides percentage of complete and accurately recorded usage data (usage recorded by BellSouth and usage recorded by other companies and sent to BellSouth for billing) that is processed and transmitted to the CLEC within thirty (30) days of the message recording date. A party measure is also provided showing completeness of BellSouth messages processed and transmitted via CMDS. BellSouth delivers its own retail usage from recording location to billing location via CMDS as well as delivering billing data to other companies. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.

Exclusions

None.

Business Rules

The purpose of these measurements is to demonstrate the level of quality of usage data delivered to the appropriate CLEC. Method of delivery is at the option of the CLEC.

Calculation

Usage Data Delivery Completeness = $(a \div b) \times 100$

- a = Total number of Recorded usage records delivered during current month that are within thirty (30) days of the message recording date
- b = Total number of Recorded usage records delivered during the current month

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Region

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • Record Type <ul style="list-style-type: none"> - BellSouth Recorded - Non-BellSouth Recorded 	<ul style="list-style-type: none"> --Report month • Record Type • None

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • Region 	<ul style="list-style-type: none"> • CLEC Usage Data Delivery Completeness is comparable to BellSouth Usage Data Delivery Completeness • ≥ 98% Within 30 Calendar Days

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

B-5: Usage Data Delivery Timeliness

Definition

This measurement provides a percentage of recorded usage data (usage recorded by BellSouth and usage recorded by other companies and sent to BellSouth for billing) that is delivered to the appropriate CLEC within six (6) calendar days from the receipt of the initial recording. A parity measure is also provided showing timeliness of BellSouth messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.

Exclusions

None

Business Rules

The purpose of this measurement is to demonstrate the level of timeliness for processing and transmission of usage data delivered to the appropriate CLEC. The usage data will be mechanically transmitted or mailed to the CLEC data processing center once daily. The Timeliness interval of usage recorded by other companies is measured from the date BellSouth receives the records to the date BellSouth distributes to the CLEC. Method of delivery is at the option of the CLEC.

Calculation

Usage Data Delivery Timeliness Current month = $(a \div b) \times 100$

- a = Total number of usage records sent within six (6) calendar days from initial recording/receipt
- b = Total number of usage records sent

Report Structure

- CLEC Aggregate
- CLEC Specific
- BellSouth Aggregate
- Region

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • Record Type <ul style="list-style-type: none"> - BellSouth Recorded - Non-BellSouth Recorded 	<ul style="list-style-type: none"> • Report Monthly • Record Type <ul style="list-style-type: none"> • None

SQM Level of Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • Region 	<ul style="list-style-type: none"> • CLEC Usage Data Delivery Timeliness is comparable to BellSouth Usage Data Delivery Timeliness • $\geq 95\%$ Delivered Within 6 Calendar Days

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

B-6: Mean Time to Deliver Usage

Definition

This measurement provides the average time it takes to deliver Usage Records to a CLEC. ~~A parity measure is also provided showing timeliness of BellSouth messages processed and transmitted via CMDS.~~ Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.

Exclusions

None

Business Rules

The purpose of this measurement is to demonstrate the average number of days it takes BellSouth to deliver Usage data to the appropriate CLEC. Usage data is mechanically transmitted or mailed to the CLEC data processing center once daily. Method of delivery is at the option of the CLEC.

Calculation

Mean Time to Deliver Usage = $(a \times b) \div c$

- a = Volume of Records Delivered
- b = Estimated number of days to deliver
- c = Total Record Volume Delivered

Note: Any usage record falling in the 30+ day interval will be added using an average figure of 31.5 days.

Report Structure

- CLEC Aggregate
- CLEC Specific
- ~~BellSouth Aggregate~~
- Region

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • Record Type <ul style="list-style-type: none"> - BellSouth Recorded - Non-BellSouth Recorded 	<ul style="list-style-type: none"> Report Monthly • Record Type • None

SQM Level of Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • Region 	<ul style="list-style-type: none"> • Mean Time to Deliver Usage to CLEC is comparable to Mean Time to Deliver Usage to BellSouth • ≤ 6 Calendar Days

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

B-7: Recurring Charge Completeness

Definition

This measure captures percentage of fractional recurring charges appearing on the correct bill.

Exclusions

None

Business Rules

The effective date of the recurring charge must be within 30 days of the bill date for the charge to appear on the correct bill.

Calculation

Recurring Charge Completeness = $(a \div b) \times 100$

- a = Count of fractional recurring charges that are on the correct bill¹
- b = Total count of fractional recurring charges that are on the correct bill

¹Correct bill = next available bill

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report month • Invoice type • Total recurring charges billed • Total billed on time 	<ul style="list-style-type: none"> • Report month • Retail Analog • Total recurring charges billed • Total billed on time

SQM Level of Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
Product/Invoice Type	
• Resale	• Parity
• UNE	• Benchmark 90%
• Interconnection	• Benchmark 90%

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

B-8: Non-Recurring Charge Completeness

Definition

This measure captures percentage of non-recurring charges appearing on the correct bill.

Exclusions

None

Business Rules

The effective date of the non-recurring charge must be within 30 days of the bill date for the charge to appear on the correct bill.

Calculation

Non-Recurring Charge Completeness = $(a \div b) \times 100$

- a = Count of non-recurring charges that are on the correct bill¹
- b = Total count of non-recurring charges that are on the correct bill

¹Correct bill = next available bill

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> Report month Invoice type Total non-recurring charges billed Total billed on time 	<ul style="list-style-type: none"> Report month Retail Analog Total non-recurring charges billed Total billed on time

SQM Level of Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
Product/Invoice Type	
<ul style="list-style-type: none"> Resale UNE Interconnection 	<ul style="list-style-type: none"> Parity Benchmark 90% Benchmark 90%

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none"> Not Applicable 	<ul style="list-style-type: none"> Not Applicable

B-9: Percent Daily Usage Feed Errors Corrected in X Business Days

Definition

Measures the timely correction of Daily Usage Feed (DUF) errors in record information and Pack formats measured separately. Errors included (1) Pack Failure errors, and (2) EMI content errors in records.

Exclusions

Usage that cannot be corrected and resent or usage that the CLEC doesn't want Retransmitted.

CLEC Problem/Issue/File Retransmission forms disputed by BellSouth SMEs that do not result in an EMI error.

CLEC notification received by BellSouth > 10 business days from transmission date of errored messages or packs.

Business Rules

This measure will provide the % of errors corrected in X Business days.

Pack Failure errors are defined as a DUF header/trailer error containing one or more of the following conditions: Grand total records not equal to records in pack or sequence/invoice numbers for a from RAQ is not sequential

EMI content errors are defined as those records with errors contained in the EMI detail records that cause a message to be unbillable by the CLEC

Only notification received via the CLEC Problem/Issue/File Retransmission form (http://www.interconnection.bellsouth.com/guides/other_guides/pdf/chapter1/ch1sec4) will be included in this measure.

When circumstances arise for multiple content errors it is not necessary for the form to be filled out in its entirety, but the CLECs agree to provide sufficient information for content error research so that a thorough investigation and resolution can be completed.

For each type of error condition, a new CLEC Problem/Issue/File Retransmission form should be submitted.

EMI content errors should be attached in a separate file from the CLEC Problem/Issue/File Retransmission form

Elapsed time is measured in business days.

The clock starts when BellSouth receives CLEC's Problem/Issue/File Retransmission form.

The clock stops when BellSouth provides the corrected usage to the CLEC using the predesignated DUF delivery method.

This measure applies only to CLECs that are ODU and ADU participants

Calculation

Timeliness of Daily Usage EMI Content Errors Corrected = (a ÷ b) X 100

- a = Total
number of Daily Usage Records with EMI Content Errors Corrected in the reporting month within 10 Business Days.
- b = Total
number of Daily Usage Records with EMI Content Errors corrected in reporting month.
-

Timeliness of Daily Usage Pack Format Errors Corrected = (a ÷ b) X 100

- a = Total
number of Daily Usage Packs with Format Errors Corrected in the reporting month within 4 Business Days.

- number of Daily Usage Packs with Format Errors corrected in reporting month b = Total

Report Structure

- Specific CLEC
 - Total number of BST disputed Daily Usage Records with EMI Content Errors received in reporting month
 - Total number of Daily Usage Records with EMI Content Errors received in reporting month
 - Total number of BST disputed Daily Usage Packs with Format Errors received in reporting month
 - Total number of Daily Usage Packs with Format Errors received in reporting month
- Aggregate CLEC
- Geographic Scope Geographic
 - Region

Data Retained

<u>Relating to CLEC Experience</u>	<u>Relating to BellSouth Performance</u>
<ul style="list-style-type: none"> • <u>Report month</u> • <u>BellSouth Recorded</u> • <u>Non-BellSouth Recorded</u> 	<ul style="list-style-type: none"> • <u>None</u>

SQM Level of Disaggregation - Analog/Benchmark

<u>SQM Level of Disaggregation</u>	<u>SQM Analog/Benchmark</u>
<ul style="list-style-type: none"> • <u>Region</u> 	<ul style="list-style-type: none"> • <u>Diagnostic</u>

SEEM Measure

<u>SEEM Measure</u>
<ul style="list-style-type: none"> • <u>No</u> • <u>Tier I</u> • <u>Tier II</u>

SEEM Disaggregation - Analog/Benchmark

<u>SEEM Disaggregation</u>	<u>SEEM Analog/Benchmark</u>
<ul style="list-style-type: none"> • <u>Not Applicable</u> 	<ul style="list-style-type: none"> • <u>Not Applicable</u>

B-10: Percent Billing Errors Corrected in X Days

Definition

Measures timely carrier bill adjustments.

Exclusions

Billing adjustments requests that are rejected by BellSouth or disputed by BellSouth.

Adjustments that are initiated by BellSouth.

Business Rules

This measure applies to ALEC wholesale bill adjustments. IXC Access billing adjustment requests are not reflected in this measure. Elapsed time is measured in business days. Clock starts when BellSouth receives the ALEC's Billing Adjustment Request (BAR) (BAR form and instructions can be found at www.inteconnection.bellsouth.com/forms/html/billing&collections.html) form and the clock stops when adjustments is made to bill through ACATS or BOCRIS (generally next ALEC bill unless adjustment request after middle of the month). BellSouth will report separately those adjustment requests that are disputed by BellSouth.

Calculation

Percent Billing Errors Corrected in 45 Days = [Number of BellSouth Adjustments in 45 Days/ Total Number of Adjustment Requests in Reporting Period] x 100

Report Structure

- ALEC Specific
- ALEC Aggregate
- Geographic Scope:
- State Specific

Data Retained

<u>Related to CLEC Experience</u>	<u>Related to BST Experience</u>
<ul style="list-style-type: none"> • <u>Number of BellSouth Adjustments in 45 days</u> • <u>Total number of Billing Adjustment Requests in Reporting Period</u> • <u>Number of Adjustments disputed by BellSouth (reported separately)</u> 	<ul style="list-style-type: none"> • <u>None</u>

SQM Disaggregation – Retail Analog/Benchmark

<u>SQM Level of Disaggregation</u>	<u>SQM Retail Analog/Benchmark</u>
<ul style="list-style-type: none"> • <u>State</u> 	<ul style="list-style-type: none"> • <u>Diagnostic</u>

SEEM Measure

<u>No</u>	<u>Tier I</u>	
	<u>Tier II</u>	

SEEM Disaggregation –Analog/Benchmark

<u>SEEM Disaggregation</u>	<u>SEEM Analog/Benchmark</u>
<ul style="list-style-type: none"> <u>Not Applicable</u> 	<ul style="list-style-type: none"> <u>Not Applicable</u>